

FIG. 1

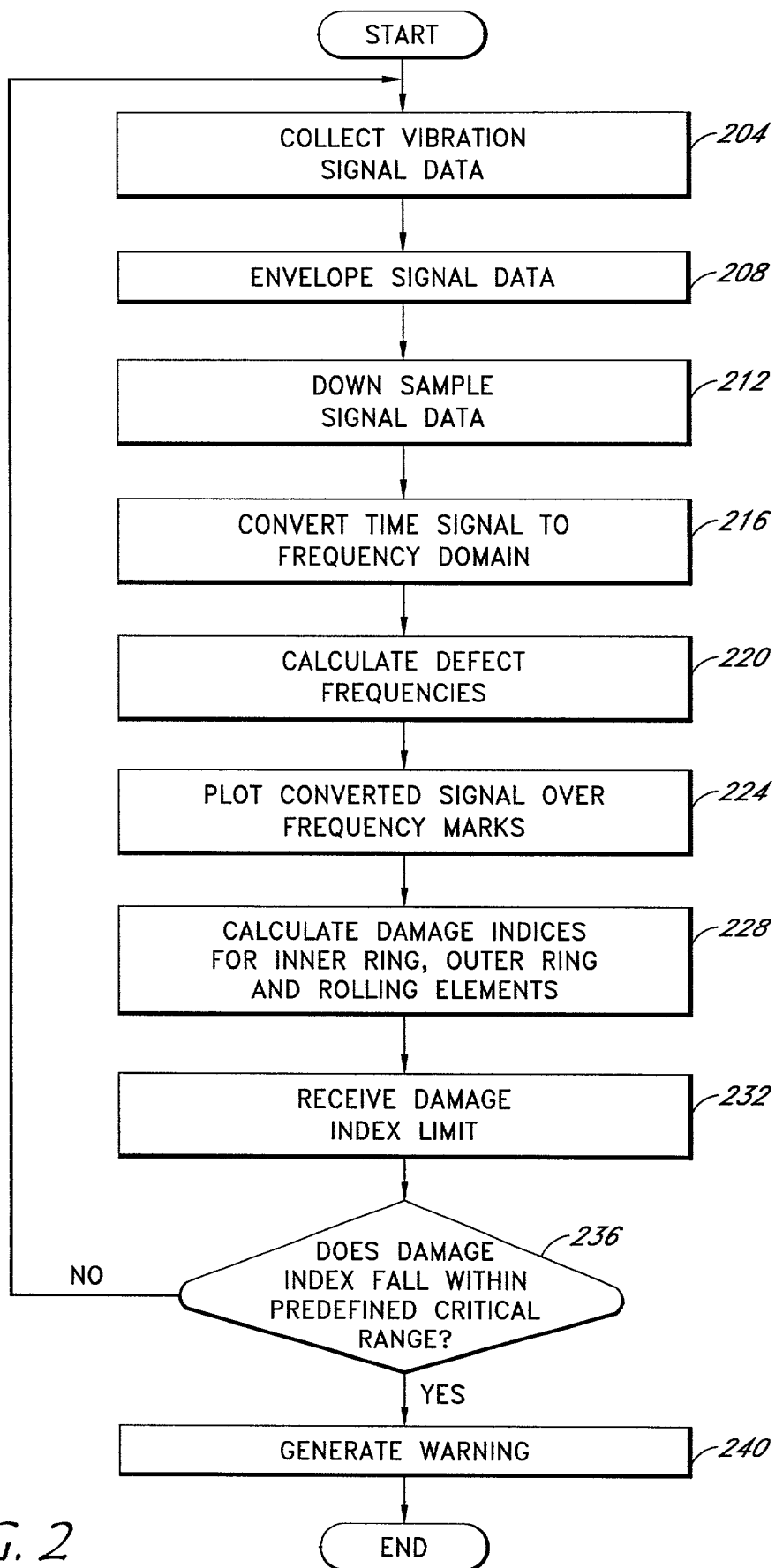


FIG. 2

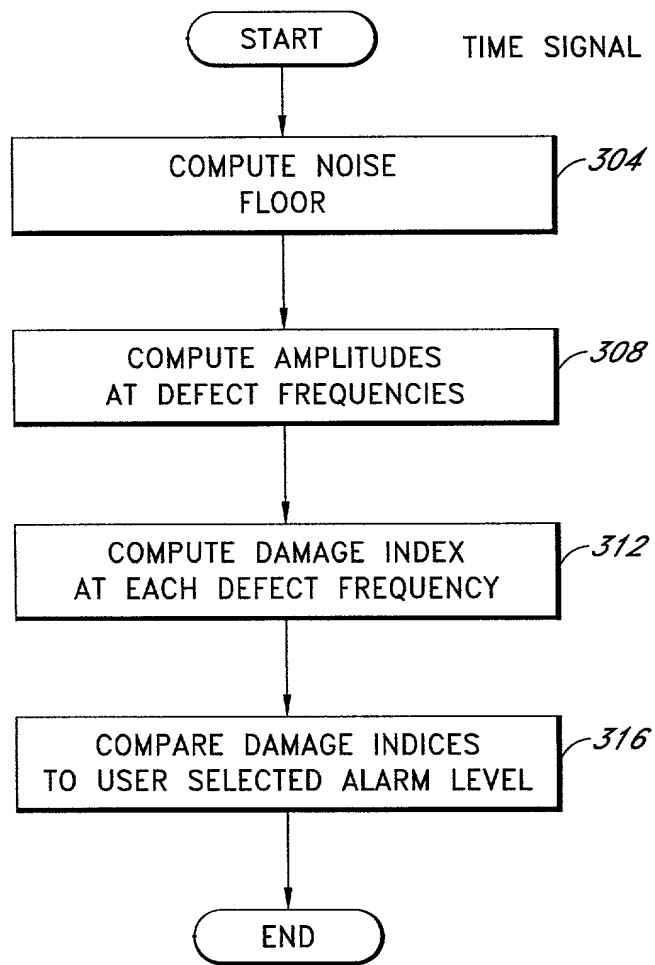
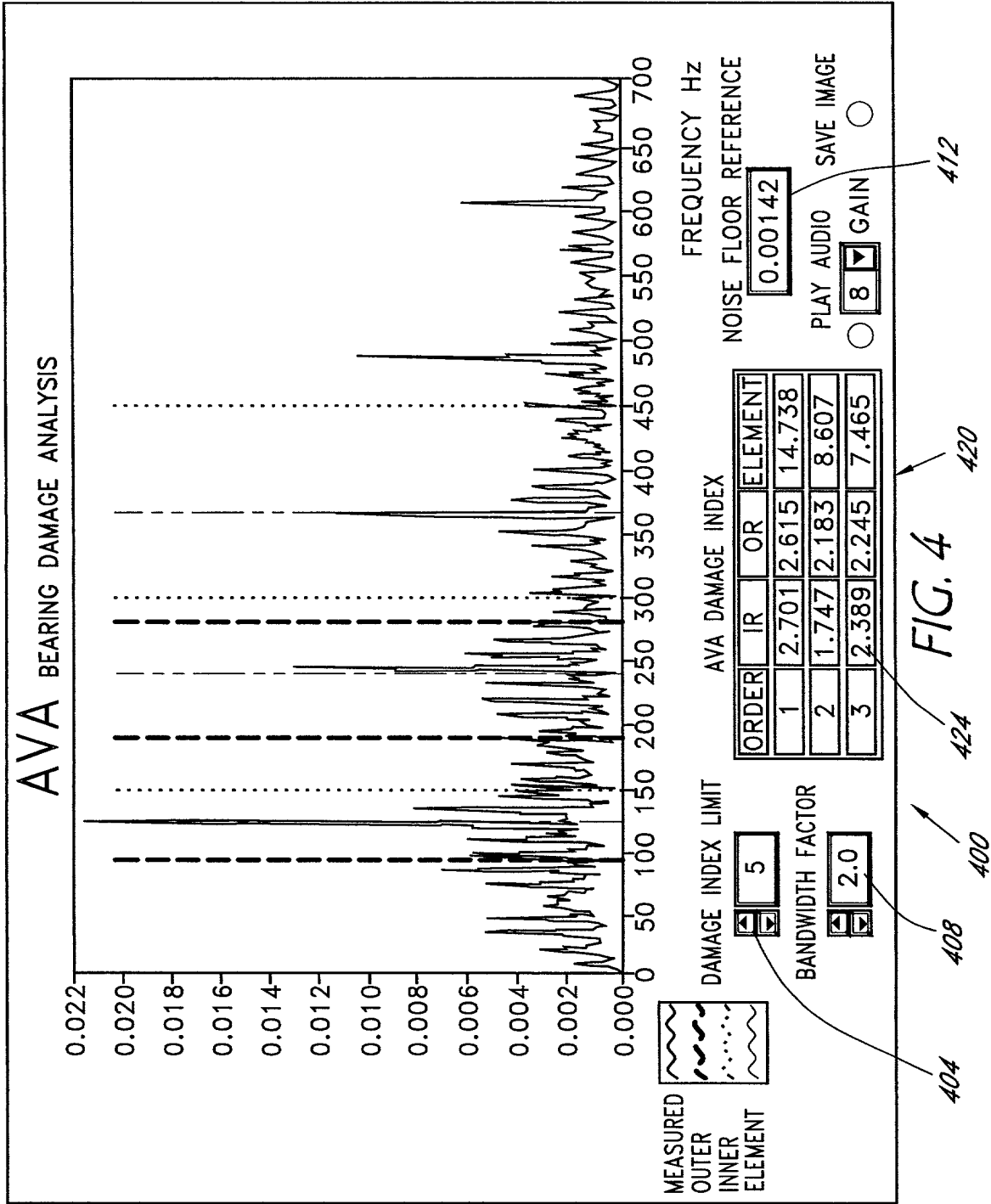


FIG. 3



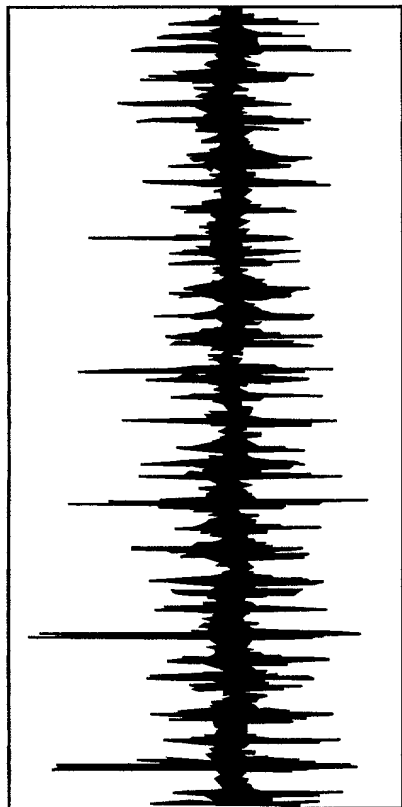


FIG. 5

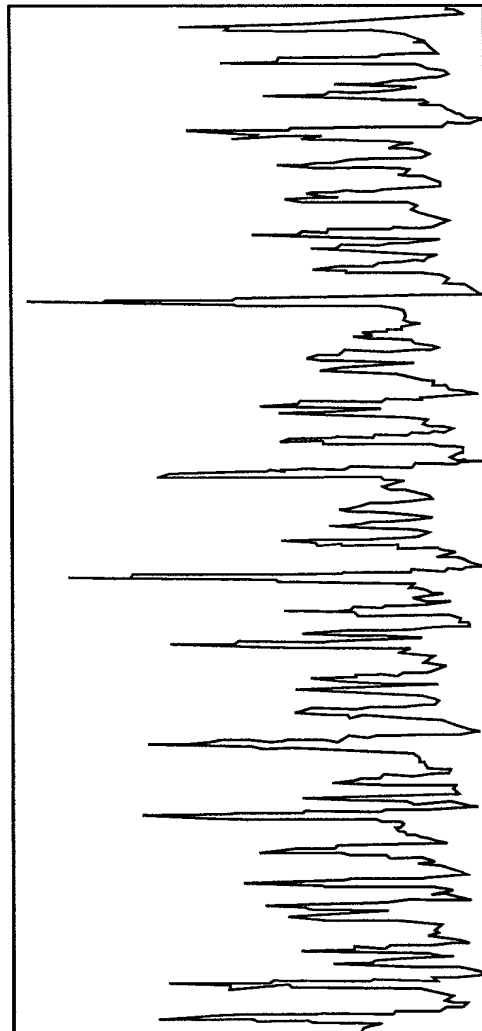


FIG. 6

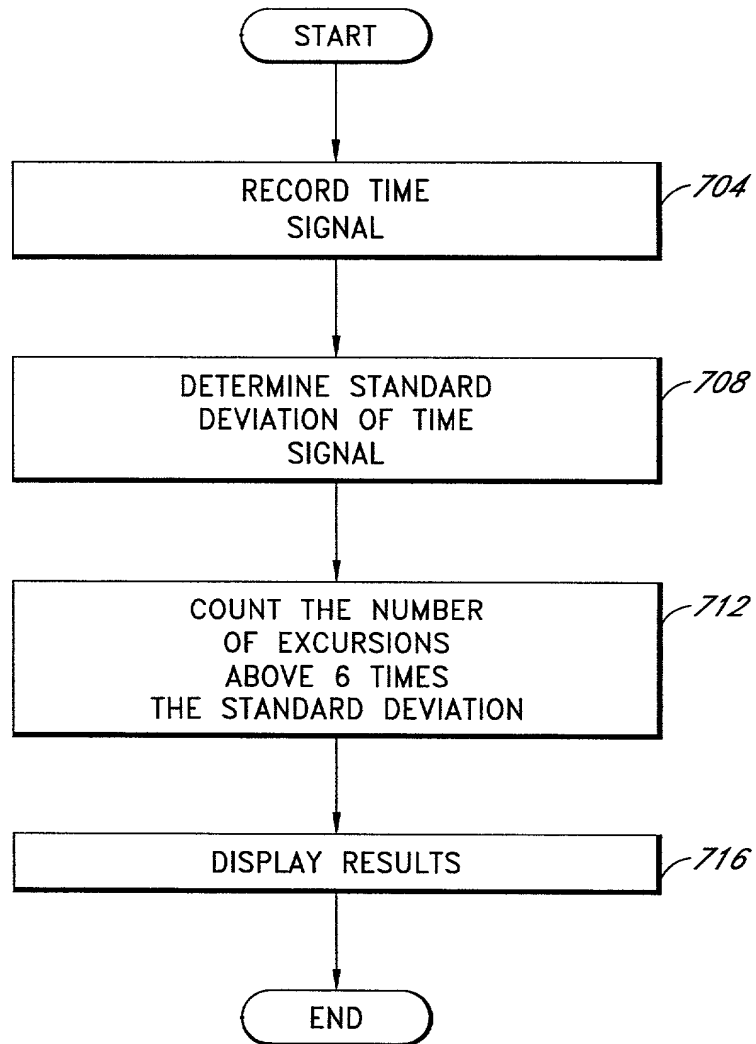


FIG. 7

ENVELOPING PROCESS

INPUT

SHAFT RPM

TIME SIGNAL

APPLY FIRST FILTER TO TIME
SIGNAL, WHEREIN FIRST FILTER
HAS A CUTOFF FREQUENCY
BASED IN PART UPON ANGULAR
VELOCITY OF SHAFT

902

APPLY RECTIFIER

904

APPLY SECOND FILTER TO TIME
SIGNAL, WHEREIN SECOND FILTER
HAS A CUTOFF FREQUENCY
BASED IN PART UPON ANGULAR
VELOCITY OF SHAFT

906

OUTPUT

ENVELOPED TIME SIGNAL

FIG. 9